

## AMENDMENTS TO THE CLAIMS

### **1-20 (Canceled)**

**21 (Currently Amended)** A coherent light source, comprising:

a light source;

a wavelength conversion element that converts part of a fundamental wave emitted from the light source into a higher harmonic wave; and

a wavelength selecting filter that has narrow-band transmission characteristics with respect to the part of the fundamental wave not converted into the higher harmonic wave, and has transmission characteristics with respect to the higher harmonic wave,

wherein the part of the fundamental wave emitted from the wavelength conversion element but not converted into the higher harmonic wave is fed back to the light source by the wavelength selecting filter, and

the higher harmonic wave is emitted to the outside after passing through the wavelength selecting filter,;

the wavelength selecting filter includes a mechanism to vary an angle with respect to the fundamental wave, thereby adjusting a transmitted wavelength, and

$\Delta\lambda_2 > \Delta\lambda_1$  is satisfied, wherein  $\Delta\lambda_1$  is a transmitted wavelength bandwidth for the fundamental wave in the wavelength selecting filter and  $\Delta\lambda_2$  is a transmitted wavelength bandwidth for the higher harmonic wave in the wavelength selecting filter.

**22 (Previously Presented)** The coherent light source according to Claim 21, wherein the wavelength selecting filter has a band pass filter and a dichroic mirror,

the band pass filter has narrow-band transmission characteristics with respect to the part of the fundamental wave not converted into the higher harmonic wave, and has transmission characteristics with respect to the higher harmonic wave,

the dichroic mirror reflects the part of the fundamental wave transmitted by the band pass filter but not converted into the higher harmonic wave, and

the higher harmonic wave passes through the band pass filter and then passes through the dichroic mirror and is emitted to the outside.

**23 (Previously Presented)** The coherent light source according to Claim 22, wherein the wavelength selecting filter is a confocal optical system, and  
the dichroic mirror is installed in the focal plane of the confocal optical system.

**24 (Previously Presented)** The coherent light source according to Claim 21, wherein the light source is a single-mode semiconductor laser.

**25 (Previously Presented)** The coherent light source according to Claim 24, wherein the cavity length of the semiconductor laser is 1 mm or more.

**26 (Previously Presented)** The coherent light source according to Claim 24, wherein the semiconductor laser has undergone high-frequency superposition.

**27 (Previously Presented)** The coherent light source according to Claim 21, wherein the light source is a fiber laser.

**28 (Previously Presented)** The coherent light source according to Claim 21, wherein the transmissivity of the higher harmonic wave of the wavelength selecting filter is 80% or more.

**29 (Previously Presented)** The coherent light source according to Claim 21, wherein the selected wavelength width of the wavelength selecting filter is 0.2 nm or less.

**30 (Previously Presented)** The coherent light source according to Claim 21, wherein the wavelength conversion element is furnished with a periodic polarization inversion structure.

**31 (Previously Presented)** The coherent light source according to Claim 21, wherein at least one of the end faces of the wavelength conversion element is inclined at an angle of 3 or more with respect to the optical axis of the wavelength conversion element.

**32 (Previously Presented)** The coherent light source according to Claim 21, further comprising a focusing optical system between the light source and the wavelength conversion element,

wherein the focusing optical system has chromatic aberration, and focuses the higher harmonic wave and the part of the fundamental wave not converted to the higher harmonic wave at different focal points.

**33 (Currently Amended)** The coherent light source according to Claim 21, wherein the wavelength conversion element ~~includes~~including an optical waveguide.

**34 (Previously Presented)** The coherent light source according to Claim 33, wherein the wavelength conversion element is directly coupled to the light source.

**35 (Previously Presented)** The coherent light source according to Claim 33, wherein the wavelength selecting filter is installed on an end face or in the interior of the optical waveguide.

**36 (Currently Amended)** The coherent light source according to Claim 21, wherein the wavelength conversion element ~~includes~~including an optical waveguide,

the wavelength selecting filter has a band pass filter installed on an end face or in the interior of the optical waveguide, and a dichroic mirror installed on an end face of the optical waveguide,

the band pass filter has narrow-band transmission characteristics with respect to the part of the fundamental wave not converted into the higher harmonic wave, and has transmission characteristics with respect to the higher harmonic wave,

the dichroic mirror reflects the part of the fundamental wave transmitted by the band pass filter but not converted into the higher harmonic wave, and

the higher harmonic wave passes through the band pass filter and then passes through the dichroic mirror and is emitted to the outside.

**37 (Previously Presented)** The coherent light source according to Claim 36, wherein the thickness of the dichroic mirror is 1 mm or more.

**38 (Previously Presented)** An optical device, having an image conversion optical system and the coherent light source according to Claim 21, wherein the light from the coherent light source is converted into a two-dimensional image by the optical system.

**39 (Previously Presented)** The optical device according to Claim 38, wherein the image conversion optical system comprises a two-dimensional beam scanning optical system.

**40 (Previously Presented)** The optical device according to Claim 38, wherein the image conversion optical system comprises a two-dimensional switch.

**41 (New)** The coherent light source according to Claim 21, wherein  $\Delta\lambda_1 < 0.6 \text{ nm}$  and  $\Delta\lambda_2 > 10 \text{ nm}$ .